

SEQUENCE LISTING

<110> Donoho, Gregory  
Hilbun, Erin  
Scoville, John  
Turner, C. Alexander Jr.  
Friedrich, Glenn  
Abuin, Alejandro  
Zambrowicz, Brian  
Sands, Arthur T.

<120> Novel Human Enzymes and Polynucleotides  
Encoding the Same

<130> LEX-0118-USA

<150> US 60/179,000  
<151> 2000-01-28

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<170> FastSEQ for Windows Version 4.0

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<211> 831

<212> DNA

<213> Homo sapiens

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atcgtgtatt	cagacataga	cctgaagaag	ctggctgaaa	tacgccagca	aatccccgtt	780
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Thr	Gln	Gly	Ala	Lys	Ile	Val	Ser	Leu	Pro	Glu	Cys	Phe	Asn	Ser	Pro

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Ser Thr Gln Lys Leu Ser Glu Val Ala Lys Glu Cys Ser Ile Tyr Leu		
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Ile Gly Gly Ser Ile Pro Glu Glu Asp Ala Gly Lys Leu Tyr Asn Thr		
85	90	95
Cys Ala Val Phe Gly Pro Asp Gly Thr Leu Leu Ala Lys Tyr Arg Lys		
100	105	110
Ile His Leu Phe Asp Ile Asp Val Pro Gly Lys Ile Thr Phe Gln Glu		
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Ser Lys Thr Leu Ser Pro Gly Asp Ser Phe Ser Thr Phe Asp Thr Pro		
130	135	140
Tyr Cys Arg Val Gly Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu		
145	150	155
Leu Ala Gln Ile Tyr Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro		
165	170	175
Gly Ala Phe Asn Leu Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln		
180	185	190
Arg Ser Arg Ala Val Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro		
195	200	205
Ala Arg Asp Asp Lys Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val		
210	215	220
Val Asn Pro Trp Gly Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala		
225	230	235
Ile Val Tyr Ser Asp Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln		
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Gln Ile Pro Val Phe Arg Gln Lys Arg Ser Asp Leu Tyr Ala Val Glu		
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Phe His Leu Cys Ile Phe Cys Leu Glu Thr Ala Tyr Cys Arg Val Gly

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Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu		
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Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln Arg Ser Arg Ala Val		
65	70	75
Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys		
85	90	95
Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val Val Asn Pro Trp Gly		
100	105	110
Glu Val Leu Ala Lys Ala Gly Thr Glu Ala Ile Val Tyr Ser Asp		
115	120	125
Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln Gln Ile Pro Val Phe		
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Arg Gln Lys Arg Ser Asp Leu Tyr Ala Val Glu Met Lys Lys Pro		
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<211> 366  
<212> DNA  
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tatgttgccct ggggacacag caccgtgggtt aacccttggg gggaggttct agccaaagct	240
ggcacacaaag aagcaatcgatgttccatgc atagacctga agaagctggc taaaatacgc	300
cagcaaatcc ccgttttagt acagaagcga tcagacctct atgctgtgga gataaaaaag	360
ccctaa	366

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<212> PRT  
<213> Homo sapiens

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Trp Glu Leu Leu Gln Arg Ser Arg Ala Val Asp Asn Gln Val Tyr Val	
35 40 45	
Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys Ala Ser Tyr Val Ala Trp	
50 55 60	
Gly His Ser Thr Val Val Asn Pro Trp Gly Glu Val Leu Ala Lys Ala	
65 70 75 80	
Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp Ile Asp Leu Lys Lys Leu	
85 90 95	
Ala Glu Ile Arg Gln Gln Ile Pro Val Phe Arg Gln Lys Arg Ser Asp	
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Leu Tyr Ala Val Glu Met Lys Lys Pro	
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<212> DNA  
<213> Homo sapiens

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gcttttaatc tgaccactgg accagcccat tggagttac ttcaagcgaaag ccggctgtt 240  
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gaagaagcaa tcgtgtattc agacatagac ctgaagaagc tggctgaaat acgcccagcaa 420  
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Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu Leu Ala Gln Ile Tyr 35 40 45  
Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu 50 55 60  
Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln Arg Ser Arg Ala Val 65 70 75 80  
Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys 85 90 95  
Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val Val Asn Pro Trp Gly 100 105 110  
Glu Val Leu Ala Lys Ala Gly Thr Glu Ala Ile Val Tyr Ser Asp 115 120 125  
Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln Gln Ile Pro Val Phe 130 135 140  
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<210> 10

<211> 130

<212> PRT

<213> Homo sapiens

<400> 10

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Trp Glu Leu Leu Gln Arg Ser Arg Ala Val Asp Asn Gln Val Tyr Val  
35 40 45

Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys Ala Ser Tyr Val Ala Trp  
50 55 60

Gly His Ser Thr Val Val Asn Pro Trp Gly Glu Val Leu Ala Lys Ala  
65 70 75 80

Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp Ile Asp Leu Lys Lys Leu  
85 90 95

Ala Glu Ile Arg Gln Gln Ile Pro Val Phe Arg Gln Lys Arg Asn Ile  
100 105 110

Phe Leu Asn Met Gln Arg Lys Phe Leu Val Asn Pro His Arg Ser Phe  
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Leu Lys

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<210> 11

<211> 459

<212> DNA

<213> Homo sapiens

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<210> 12

<211> 152

<212> PRT

<213> Homo sapiens

<400> 12

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Lys Ser Asp Asn Val Thr Arg Ala Cys Ser Phe Ile Arg Glu Ala Ala  
20 25 30

Thr Gln Gly Ala Lys Ile Val Ser Leu Pro Glu Cys Phe Asn Ser Pro  
35 40 45

Tyr Gly Ala Lys Tyr Phe Pro Glu Tyr Ala Glu Lys Ile Pro Gly Glu  
50 55 60

Ser Thr Gln Lys Leu Ser Glu Val Ala Lys Glu Cys Ser Ile Tyr Leu  
 65 70 75 80  
 Ile Gly Gly Ser Ile Pro Glu Glu Asp Ala Gly Lys Leu Tyr Asn Thr  
 85 90 95  
 Cys Ala Val Phe Gly Pro Asp Gly Thr Leu Leu Ala Lys Tyr Arg Lys  
 100 105 110  
 Ile His Leu Phe Asp Ile Asp Val Pro Gly Lys Ile Thr Phe Gln Glu  
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 Met Tyr Gln Ile Ser Leu Pro Leu  
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<210> 13

<211> 858

<212> DNA

<213> Homo sapiens

<400> 13

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<211> 285

<212> PRT

<213> Homo sapiens

<400> 14

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 Thr Gln Gly Ala Lys Ile Val Ser Leu Pro Glu Cys Phe Asn Ser Pro 35 40 45  
 Tyr Gly Ala Lys Tyr Phe Pro Glu Tyr Ala Glu Lys Ile Pro Gly Glu 50 55 60  
 Ser Thr Gln Lys Leu Ser Glu Val Ala Lys Glu Cys Ser Ile Tyr Leu 65 70 75 80  
 Ile Gly Gly Ser Ile Pro Glu Glu Asp Ala Gly Lys Leu Tyr Asn Thr 85 90 95  
 Cys Ala Val Phe Gly Pro Asp Gly Thr Leu Leu Ala Lys Tyr Arg Lys 100 105 110  
 Ile His Leu Phe Asp Ile Asp Val Pro Glu Lys Ile Thr Phe Gln Glu

115	120	125
Ser Lys Thr Leu Ser Pro Gly Asp Ser Phe Ser Thr Phe Asp Thr Pro		
130	135	140
Tyr Cys Arg Val Gly Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu		
145	150	155
Leu Ala Gln Ile Tyr Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro		
165	170	175
Gly Ala Phe Asn Leu Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln		
180	185	190
Arg Ser Arg Ala Val Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro		
195	200	205
Ala Arg Asp Asp Lys Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val		
210	215	220
Val Asn Pro Trp Gly Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala		
225	230	235
Ile Val Tyr Ser Asp Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln		
245	250	255
Gln Ile Pro Val Phe Arg Gln Lys Arg Asn Ile Phe Leu Asn Met Gln		
260	265	270
Arg Lys Phe Leu Val Asn Pro His Arg Ser Phe Leu Lys		
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<211> 3093

<212> DNA

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